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WITNESS my hand this
Twenty-third day of July 2004

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A handwritten signature in cursive script, appearing to read "J. Billingsley".

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PROVISIONAL SPECIFICATION

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Invention Title: **Animal restraint**

The invention is described in the following statement:

ANIMAL RESTRAINT

Background of the Invention

- 5 The present invention relates to a restraint for an animal. More particularly, the present invention relates to a restraint with an adjusting peripheral extent.

Description of the Prior Art

- 10 The reference to any prior art in this specification is not, and should not be taken as, an acknowledgement or any form of suggestion that the prior art forms part of the common general knowledge in Australia.

- 15 Training domestic animals is a common approach for encouraging the compliance of the animal with disciplinary commands from humans. Approaches for training animals often involve physically controlling the animal by way of, for the example of a dog, a restraint in the form of a collar, which is attached to a tether, which is usually in the form of a leash. Other animals with different anatomies, such as horses, require differently designed restraints, such as harnesses, which are tethered to a rope or leash.

- 20 Certain training regimes involve physical restraints which act not only to physically restrain the animal according to a trainer's or owner's requirements, but also tighten around a portion of the animal's body when the animal does not obey an appropriate command. Such restraints are commonly termed "choker chains". Simpler varieties of choker chains designed for use on dogs include a leash portion integrally formed with a collar portion. The collar portion is
25 looped about the dog's neck region. When the animal does not respond according to a given command to stop or slow its movement, the collar portion tightens about the neck by a cinching effect, which is proportional to the animal's movements away from the direction of the leash of the chain. This tightening provides a negative reinforcing effect such that the animal learns to associate the failure to respond with the painful sensation caused by the
30 choking effect of the chain.

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These simple, choker-type devices are viewed by many trainers, pet owners and animal activists as a cruel and inhumane mechanism for training an animal, as a consequence of the severe pain they can impart.

- 5 Alternative devices have been developed which employ the basic principle of these simple choker chains, but with various modifications, in an attempt to reduce the discomfort to the animal. These devices generally employ a tightening belt which is disposed about an animal's torso region, which is more robust and less sensitive than the neck region. Nonetheless, these devices can still tighten excessively about the animal, and cause significant discomfort and
- 0 pain to the animal during training.

Summary of the Present Invention

- According to the present invention there is provided a restraint adapted to encircle a girth of
- 15 an animal, the restraint including:
- a belt having first and second belt ends, and an elongate linker,
 - the first belt end having an aperture; and
 - the elongate linker engaging the second belt end at a first linker end, the linker passing through the aperture to terminate at a stopper at a second linker end;
- 20 wherein a pulling force directed away from the girth of the animal applied to the stopper when the restraint is in a first, larger girth position, allows movement of the elongate linker through the aperture throughout a plurality of second, smaller girth positions to a minimum girth position, the minimum girth position being substantially similar to that of the girth of the animal.

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Preferably, the movement of the elongate linker through the aperture provides a noise detectable by the animal.

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Even more preferably, the noise assists in the training of the animal.

In a preferred form, the elongate linker is between 8cm and 14 cm in length.

In a further preferred form, the elongate linker is approximately 10cm in length.

Preferably, the stopper of the restraint is adapted to engage a tether.

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In one preferred form, the elongate linker is a chain.

In another form, the restraint further includes a placement device to facilitate location and/or adjustment of the restraint about the girth of the animal.

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Preferably, the placement device is a buckle.

In another preferred form, the aperture of the restraint is in the form of a ring.

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In a particularly preferred form, the restraint further includes a second belt-end ring on the second belt end, the second belt-end ring for engaging the first end of the elongate portion of the linker.

In yet a further preferred form, the stopper of the restraint is substantially annular.

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Brief Description of the Drawings

By way of example only, an embodiment of the present invention will now be described more fully hereinafter with reference to the accompanying drawings, in which: -

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Figure 1 is a schematic view of a collar according to a preferred embodiment of the present invention in a first position;

Figure 2 is a schematic view of the collar shown in Figure 1, in a second, tightened position.

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Detailed Description of the Preferred Embodiments

An example of a restraint according to the invention will now be described with reference to Figure 1.

5 As shown, the restraint 10 generally includes a belt 9 with a first belt end 1, a second belt end 2, and an elongate linker, 3. In this embodiment, the belt ends 1, 2, are affixed to respective first and second belt-end rings, 4, 5. The linker 3, is in the form of a chain and is attached to the second belt end 2 by the second belt-end ring 5, and passes through an aperture provided by the first belt-end ring 4. The restraint 10 also includes a placement device in the form of a
 .0 buckle 8, for ease of placement and/or adjustment of the restraint 10, around a girth of an animal.

Although in the present embodiment the linker 3 is attached to the second belt end 2 by way of a second belt-end ring 5, it is to be understood that alternative arrangements for fixing the
 15 linker to the second belt end 2, such as via direct attachment, may be substituted for the presently exemplified embodiment.

The linker 3 terminates at a ring-shaped stopper 7, at an end of the linker 3 opposite the attachment to the second belt-end ring 5. Application of a pulling force to the stopper 7, directed away from the girth of the animal, as indicated by the arrow in Figure 1, pulls the
 20 linker 3 through the first belt-end ring 4 on the first belt end 1, thereby alternating the restraint 10 from a first, larger girth position between a plurality of second, smaller girth positions, to a minimum girth position, the minimum girth position being substantially similar to the girth of the animal about which the restraint 10 is placed.

25 The minimum girth position is shown in Figure 2, where the linker 3 has been substantially communicated through the first belt-end ring 4.

Preferably, the stopper 7 is adapted to selectively engage a tether, such as a lead, leash or a
 30 rope, such that upon application of a pulling force to the tether, the force is transferred to the stopper 7, thereby effecting a reduction in the girth of the restraint 10.

In use, the restraint 10 is placed about the girth of the animal, such as a neck region of a dog. The fit of the restraint in the first, larger girth position, shown in Figure 1, is slightly greater than the girth of the region about which the restraint is placed, preferably by an amount substantially the same as the elongate length of the linker 3. Upon application of the pulling force to the stopper 7, the restraint 10 can assume one of the plurality of smaller girth positions or the minimum girth position, depending on the degree and/or duration of the force. This alteration is achieved by virtue of the linker 3 moving through the first belt-end ring 4 following the application of the force.

The second girth positions and the minimum girth position are tighter about the girth of the animal than the first, larger girth position of the restraint 10, and as such, are also less comfortable to the animal. The minimum girth position, which is shown in Figure 2, is substantially the same as the girth of the animal about which the restraint is placed. As such, when the pulling force is applied to the stopper 7, the girth of the animal is not excessively restricted as a consequence of the minimum girth position being determined by the length of the elongate linker 3. Preferably, the elongate linker 3 is eight to twelve centimetres in length. The design of the restraint 10 is such that there is no proportionally continuous tightening of the restraint 10 with the continued movement of the animal and/or a continued pulling force applied to the stopper 7, beyond a girth substantially similar to the girth of the animal about which the restraint 10 is placed.

After repeated use, an association may be formed by the animal between the sound of the linker 3 moving through the first belt-end ring 4, and the consequential tightening of the restraint 10. Such 'Pavlovian'-type conditioning to an auditory cue may provide a behavioural change in the animal which may be useful in training the animal. For example, if the animal is wearing the restraint 10 as a collar, and is walking on a leash at a pace which exceeds a pace set by an owner or trainer holding the leash, or if the animal fails to obey a 'stop' command, the sound of the linker 3 moving through the first belt-end ring 4, will be initiated. The sound may eventually provide an auditory cue to the animal that the restraint 10 will tighten if the animal does not respond to a command. As such, the animal may, for example,

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slow a pace or cease movement altogether in order to prevent the tightening of the restraint through the range of the second, smaller girth positions to the minimum girth position.

5 Although the elongate linker 3 of the present embodiment is exemplified as a chain, it is to be understood that alternative arrangements such as cables or ropes may be used, provided a noise which is detectable by the animal is created upon movement of the linker 3 through the first belt-end ring 4.

10 Furthermore, although the first belt-end ring 4 is presently exemplified as an annular member, it is to be understood that alternative arrangements for receiving the linker chain 6, and optionally assisting to produce the noise detectable by the animal upon movement of the linker chain 6, may also be used.

15 Persons skilled in the art will appreciate that numerous variations and modifications will become apparent. All such variations and modifications which become apparent to persons skilled in the art, should be considered to fall within the spirit and scope that the invention broadly appearing before described.

DATED THIS 17th day of July, 2003.

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MIGUEL ANTONIO VASQUEZ

By Its Patent Attorneys

DAVIES COLLISON CAVE

FIGURE 1

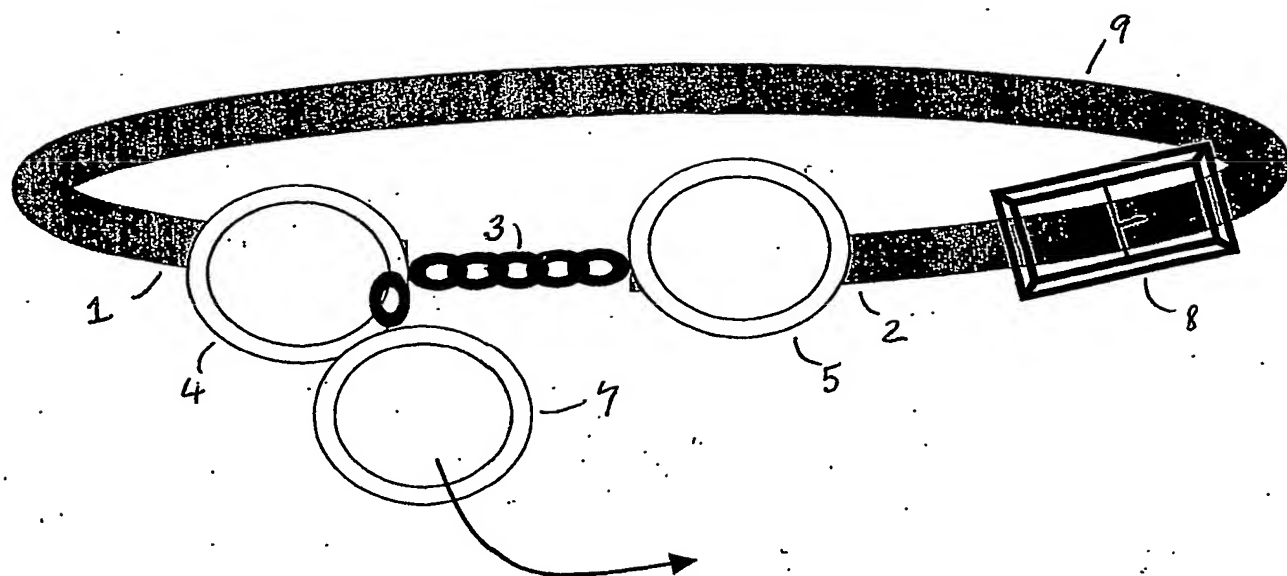


FIGURE 2

